



CONSERVATION LAW FOUNDATION

October 15, 2008

Philip Giudice, Commissioner
Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Re: Comments – RPS Class I & Class II Regulations

Dear Commissioner Giudice:

The Conservation Law Foundation (CLF) appreciates this opportunity to submit comments in connection with DOER's implementation of Section 32 of the "Green Communities Act" with respect to updating certain aspects of Class I of the Massachusetts Renewable Energy Portfolio Standard (RPS) and establishing a new Class II. These provisions are important components of the strong support for expanded renewable energy embodied in the Green Communities Act, including a mandate for new renewable energy to supply at least 15% of the Commonwealth's electricity by 2020 and measures to promote the continued operation of existing renewable energy generation.

Ultimately, taken together with the Act's ambitious energy efficiency and conservation measures geared toward eliminating load growth, the renewable energy provisions should foster the displacement of traditional polluting sources of power generation with truly clean energy. The benefits of such a transition are many, including reducing harmful global warming pollution, promoting fuel diversity and energy security, and hedging against volatile fossil fuel energy prices. It is with these goals in mind that we submit the following comments in response to DOER's specific questions regarding RPS Class I and Class II regulations.

Class I

What should the Alternative Compliance Payment (ACP) amount be for Class I, and how should it be calculated?

More than a decade ago, Massachusetts staked out a leadership position supporting the development of new renewable energy through the adoption of one of the first RPS mandates in the nation. Mass. G.L. c. 25A, s. 11F. Since then, many other states have followed suit, including several of the New England states. New Hampshire and Rhode Island are some of the most recent to adopt an RPS; CLF has been actively involved in shaping the implementation of these states' RPS programs, which were informed by – and modeled on – the Massachusetts RPS

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and related regulations. Among other important aspects, the New Hampshire, Rhode Island and Maine ACP levels have been guided by the ACP level established by Massachusetts (pursuant to 225 CMR 14.08(3)(a)(2)), and we have finally begun to move toward a more robust regional market for renewable energy certificates (RECs). Absent a showing that the current ACP level is somehow ineffective or otherwise problematic, it makes no sense for Massachusetts to disrupt this increasing harmonization of RPS markets in the region.

In addition, renewable energy markets are not unique in benefitting from greater levels of regulatory certainty and predictability. Indeed, at this relatively early stage they are particularly vulnerable to disruptions. Maintaining the existing ACP level (adjusted annually to account for inflation) is also desirable in that it would promote regulatory certainty.

In a condition of relative scarcity (i.e., where there is a gap between supply and demand for new renewable energy), the ACP level drives REC prices. Maintaining a robust REC market requires that the ACP level be set sufficiently high that ACP remains a less attractive option than buying RECs while also ensuring that new renewable energy facilities receive needed income to finance their development. The current rate of \$58.58, based on an initial level of \$50 set in 2003 and adjusted annually to correspond to increases in the Consumer Price Index, is effective, and should continue to escalate gradually over time to account for increases in capital costs for renewable energy projects.

What new or modified criteria should be required for any of the specified eligible technologies or fuels?

Biomass: In connection with the last round of significant revisions to the RPS regulations, DOER initially proposed but then expressly withdrew provisions that would have specifically identified Construction and Demolition debris (C&D) wood as an Eligible Biomass Fuel. See June 6, 2007 letter from then-DOER Commissioner David O'Connor to Steven James, Clerk of the House of Representatives (noting that "DOER has decided to withdraw revisions to the regulations relating to the eligibility of Construction and Demolition (C&D) debris as an RPS-eligible biomass fuel.") Now, at least one new power generation project has been proposed (the so-called Palmer "Renewable Energy" facility proposed for East Springfield, Massachusetts) that would rely primarily on the combustion of C&D debris, yet project proponents nonetheless assert that the facility should qualify for the Massachusetts RPS – ostensibly on the basis that it would be burning material re-characterized as "recycled wood" (rather than solid waste) pursuant to a beneficial use determination (BUD) from Massachusetts DEP. CLF strongly objects to such a back-door approach to RPS-eligibility for the combustion of C&D debris, particularly without the benefit of full environmental review and without appropriate RPS air emissions standards in place – thereby contrary to the express requirement for eligible biomass facilities to meet a "low emissions" standard.

As CLF noted during the RPS/biomass rulemaking proceeding in 2006 and 2007, we are very concerned about the potential use of C&D waste as an RPS-eligible biomass fuel – and even more concerned to the extent any such eligibility is not accompanied by stringent air emissions limits for known C&D waste stream contaminants such as heavy metals, volatile organic compounds (VOCs) and other toxins. C&D waste should only be considered eligible as a

biomass fuel if re-use is infeasible and if it can be demonstrated that it does not pose a threat to human health or the environment. Reuse and recycling of C&D waste should be aggressively pursued as a first recourse; use as fuel for biomass facilities should not be the path of least resistance for disposal of contaminated C&D waste.

Importantly, while improvements have been made in recent years, we continue to question the ability to effectively sort C&D waste in a way that ensures only clean wood debris reliably can be extracted for use as a biomass fuel. Without effective and reliable sorting, the risk of heavy metals and other toxic pollutants becoming airborne is unacceptably high. Thus, to the extent any C&D waste is ultimately allowed to qualify as an eligible biomass fuel, it must at a minimum be accompanied not only by strict sorting requirements but also by stringent air emissions standards that require use of best achievable emissions limits as well as continuous emissions monitoring.

While air emissions limits for RPS-eligible biomass facilities at one time were set on a case-by-case basis and included limits on SO₂, ammonia, CO, VOCs, toxics and opacity in addition to NO_x and particulate matter (PM), the 2007 revisions to the regulations set a new standardized set of limits just for NO_x and PM. The “Guideline on the RPS Eligibility of Biomass Generating Units”, dated June 2, 2006, explained (at p. 4) the underlying rationale for this, noting that NO_x and PM are the two most critical pollutants produced by “wood-fired boilers,” and that other emission limits could be left to state air permit requirements. These limits are not sufficient to address pollutants from C&D debris-fired boilers, nor would leaving additional emission limits to other state air permits meet the RPS’ requirement that only “low-emissions” biomass facilities be eligible. To the extent C&D debris might now become in any way eligible pursuant to the RPS, whether through a reclassification pursuant to a BUD or otherwise, the biomass/RPS air emission limits must correspondingly be revised to account for likely contaminants in the C&D debris.

Incremental and New Hydropower: The Green Communities Act clearly intends for rigorous environmental criteria to be adopted for eligible hydropower facilities, and specifically requires “appropriate and site-specific standards that address adequate and healthy river flows, water quality standards, fish passage and protection measures and mitigation and enhancement opportunities in the impacted watershed as determined by the department in consultation with relevant state and federal agencies having oversight and jurisdiction over hydropower facilities.” The regulations should ensure that existing, aging hydropower facilities will be rewarded for improving environmental performance while increasing their energy generation benefits, and that eligible new facilities will avoid significant environmental impacts. In setting these standards, DOER should consult with Massachusetts DEP, the Massachusetts Division of Fish & Wildlife, and Massachusetts Riverways to set reasonable environmental performance standards for eligible hydropower, and draw upon the experience of the Massachusetts Renewable Energy Trust Fund (RETF) regarding environmental performance criteria used in connection with the RETF’s efforts to support hydropower projects.

CLF also recommends that DOER borrow from the standards used by the Low Impact Hydropower Institute – a nonprofit organization based in Maine that takes an objective approach to setting and applying environmental standards to hydropower facilities in site-specific

contexts.¹ It is particularly important that the standards adopted by DOER ensure adequate and healthy river flows given that many of the region's rivers are severely depleted, and that fish passage is provided for anadromous, diadromous and catadromous species, including American eel (*Anguilla rostrata*). In addition, the regulations should ensure that Clean Water Act Section 401 water quality criteria are met.

In calculating the extent of a hydropower facility's output that should be eligible as "incremental new" output (up to 25 MW), DOER should determine the facility's average output prior to the addition of the incremental new capacity by taking an average over a sufficient number of years (e.g., 10 years) to account for significant fluctuations as between flood and drought years. Only incremental new output beyond that baseline and attributable to improvements directed at increasing the facility's capacity should be eligible.

What should be the minimum percentage of megawatt hour (MWh) sales for on-site generation that is up to 2MW, located within Massachusetts, and began commercial operation after December 31, 2007? What should be the appropriate ACP rate for this technology?

There are many advantages to distributed renewable energy generation, and the new on-site generation "carve-out" in the RPS offers an opportunity to meaningfully boost deployment of such clean energy resources. The minimum percentage target should be set based on a realistic assessment of achievable increases in deployment of on-site renewable energy generation, taking into account net-metering reforms that will help remove some existing barriers. In order to provide predictability and clear market signals to those seeking to install on-site generation as well as developers of utility-scale renewable energy facilities that will qualify for the remainder of the RPS targets, it is important to clearly define on-site generation targets now that will be applicable over time.

In addition, given the Commonwealth's appropriate yet ambitious commitment to install 250 MW of solar generation by 2017, at least some of this new clean solar generation must come from distributed "on-site" generation. Given that the economic requirements for solar are markedly different from other forms of distributed generation and call for a specifically-tailored on-site solar REC market, a separate on-site generation target and higher ACP rate should be set for solar than for other types of on-site generation.

The appropriate ACP rate for on-site generation is required by statute to be set at "levels that shall stimulate the development of new on-site renewable generating sources." Section 11F(h). ACP levels for on-site generation generally should be set at a rate higher than the standard Class I rate in order to account for lower economies of scale for smaller (2MW or less) distributed facilities. The statute notably contemplates on-site ACP rate "levels," plural, and thus allows for separate ACP rates to be set to meet the relatively greater needs of on-site solar. ACP levels should be sufficiently high that REC prices (typically heavily influenced by ACP levels) will meet the economic needs of on-site generation projects; levels should also be high enough that electric suppliers will have an incentive to buy RECs rather than pay ACP. Any revenues from solar ACP should be directed toward solar projects that will help meet the solar target.

¹ See <http://lowimpacthydro.org>.

For Class II

How should the Annual Class II RPS percentage rate be determined, and what should that rate be?

The Massachusetts RPS for the first time will now include a “Class II” that is intended to provide support for existing renewable energy resources which are important for providing diversity in our electricity supply and moderating electricity prices. The Class II RPS requirement should be based on the actual amount of existing (pre-1998) generation from qualified facilities that are able to sell electricity for delivery to Massachusetts consumers. In this respect, the purpose of Class II is fundamentally different from Class I: the objective is to keep existing generation running, not to support initial capital investments for building new projects. This objective is set forth in the express language of the Green Communities Act: i.e., “Such minimum percentage requirement for kilowatt-hour sales from Class II energy generating sources may be adjusted by the department *as necessary to promote the continued operation of existing energy generating resources* that meet the requirements of said subsection (d) [i.e., Class II of the RPS].” The target for the initial compliance year should be identified in terms of total megawatt hours, and then reflected as a percentage of total load on an annual basis. If total electric load remains flat going forward (e.g., due to expanded efficiency and conservation programs), then the Class II target similarly should remain level. If load increases, the percentage target for Class II should be reduced proportionally to reflect the fact that Class II resources are not increasing in supply.

Given that hydropower is a significant source of existing renewable energy generation in the region and that hydropower output can fluctuate significantly from drought years to flood years, one reasonable approach to account for the hydropower component of the existing renewable energy generation mix would be to calculate the 10-year average output from eligible hydropower generation serving Massachusetts customers. Alternatively, the Class II target could be adjusted on an annual basis and allow REC-banking to account for such fluctuations.

CLF is opposed to the setting of any targets that would specifically direct financial incentives toward existing waste-to-energy (WTE) generating facilities, given that (1) WTE facilities are not true renewable energy generating sources; and (2) considering the carbon and energy cost equations as well as very real concerns about toxic air emissions, it does not make sense to provide an incentive for converting waste to energy whenever recycling is a viable alternative.

What criteria should be required for any of the specified eligible technologies or fuels?

The statutory requirements with respect to general eligibility criteria for biomass and hydropower are the same for Class I and Class II (other than with respect to whether the facilities are “new” or existing/old facilities), meaning that the same general environmental performance criteria should apply.

The Act also requires that eligible WTE must be part of a conventional municipal solid waste plant in commercial use and must operate or contract for one or more recycling programs approved by Massachusetts DEP. DOER should clarify that eligible WTE facilities must recycle

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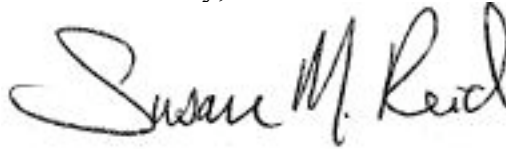
materials to the maximum extent feasible; otherwise, new RPS Class II eligibility would provide a counterproductive incentive for diverting materials from the recycling stream. In addition, in keeping with the clean energy objectives of the RPS, DOER should require eligible WTE facilities to meet air emission limits for typical pollutants associated with the combustion of municipal waste, including VOCs and heavy metals, to ensure that the RPS does not provide a financial incentive for ongoing operation of facilities that are sources of acute toxic pollution.

What should the Alternative Compliance Payment (ACP) amount be for Class II, and how should it be calculated?

The ACP amount for Class II should be set at a significantly lower level than for Class I to account for the very different objectives of Class II – i.e., to maintain operation of existing facilities rather than to build new ones. In doing so, DOER should look to successful RPS programs for existing resources in other states and to data supplied by existing renewable energy generators regarding the gap between their working capital and what is required to maintain their facilities or improve them to meet the Class II RPS criteria.

Thank you for the opportunity to provide these comments.

Sincerely,

A handwritten signature in black ink that reads "Susan M. Reid". The signature is fluid and cursive, with the first name "Susan" being the most prominent part.

Susan M. Reid, Esq.
Director, MA Clean Energy & Climate Change Initiative